DL 109s, FAs and DEMONSTRATORS

NEW HAVEN

DIESEL LOCOMOTIVES VOLUME 2

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DL 109s, FA UNITS AND DEMONSTRATORS

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DEDICATION

To Mike Usenia, an early New Haven diesel photographer.

ACKNOWLEDGEMENTS

This book is based on the collection of black and white and color negatives owned by Robert A. Liljestrand. Text and captions were written by David R. Sweetland and word-processed by Carol Owens. J.W. Swanberg edited the book and furnished technical information. Ross Sweetland designed the cover.

FRONT COVER PHOTO TOP: #0723 at Boston in the mid-1950s (Bob's Photo collection)

FRONT COVER PHOTO BOTTOM: #0418-0453-0421 on train BO-3 at Providence on January 3, 1958. (David R. Sweetland)

REAR COVER PHOTO TOP: Alco builders photo of #0418 and 0456 taken in 1959 (Bob's Photo collection)

REAR COVER PHOTO BOTTOM: #0718 at Boston in the mid-1950s. (Bob's Photo collection)

TITLE PAGE PHOTO: The nine car THE BAY STATE, Train #11, was ready to depart Old Saybrook, CT on May 30, 1955, with DL109s #0717 and 0714 in charge from Boston to New Haven. (Ed Hermanns)

CLASS DER-1

CLASS	ROAD NO.	BUILDER	MODEL	DATE BUILT
DER-1	0700-0709	ALCO	DL109	12/41-4/42
DER-1A	0710-0719	ALCO	DL109	7/42-1/43
DER-1B	0720-0729	ALCO	DL109	1-4/44
DER-1C	0730-0739	ALCO	DL109	10/44-1/45
DER-1C	0740-0744	ALCO	DL109	1-2/45
DER-1C	0745-0759	ALCO	DL109	2-4/45

In January 1940, Alco completed its first 2000hp road passenger unit, listed only as a class 606 DL 345, 345 standing for weight in thousands of pounds. Rock Island #624 had twin Alco 538T diesel engines, General Electric GT542 main generators and GE 730 traction motors. The production model, later called specification DL109, had two Alco 1000hp 539T diesel engines, GT557 main generators and a shorter frame, 74-feet 6 ½-inches over couplers. The units could be geared for 120, 100 or 80 MPH operation. During 1940 and early 1941, eleven more A-units were built for the GM&O, Rock Island, Southern and Santa Fe Railroads plus four B-units (specification DL 110).

With traffic levels increasing on the New Haven just before World War II, the road placed an order for ten DL109 units to be used in combination freight or passenger service. The New Haven specified 19:64 gear ratio for 80 MPH operation and GE model 726 traction motors. The A1A trucks had a wheelbase of 15-feet 4-inches, and the traction motors were mounted on axles with 40-inch wheels. Alco had settled on the 74-volt control system – a standard set by EMC – for the units which also made the units compatible for possible MUing with EMC/EMD units.

New Haven units #0700-0701 were completed on December 10, 1941, and placed in service at Boston on December 13, 1941. Their first Shore Line assignment was Train 175 on December 14. With ten in service by April 1942, an order was quickly placed for ten more (#0710-0719). On April 4, 1942, the War Production Board took over control of locomotive orders with Alco only building diesel switchers/road switchers at the rate of 30 units per month plus steam locomotives. The one exception was the freight/passenger DL109s for the New Haven, which Alco was allowed to produce one to four units per month. The WPB did allow the production of one more DL109 for the GM&O and one for the Southern to match with units built before the war. As delivered, the New Haven units were painted green with the yellow nose panel and three stripes plus a large oval around the windows. Each unit's manually controlled shutters over the roof fans were added in a box roof housing, factory installed with later new units.

Ten more units were allowed for delivery in early 1944 (#0720-0729) and ten (#0730-0739) for the last quarter of 1944. The final group of DL109s, #0740-0759, came in 1945. The last twenty units had a Hunter green paint scheme with gold (yellow) nose panel and six gold horizontal pin stripes. A few units were repainted at Van Nest Shops during the war years with a dark green carbody, five wide stripes and a yellow nose stripe.

Another exterior change made to the 0700s were steel side panels installed in #0740 and then upper grill screening to replace the windows on all the other units at Readville Shop during the 1949-1951 period which replaced the lower louvers. During the 1947 period, the 0700s were repainted in the then current warm orange paint scheme with silver gray pin stripes and a dark green roof and upper side panels.

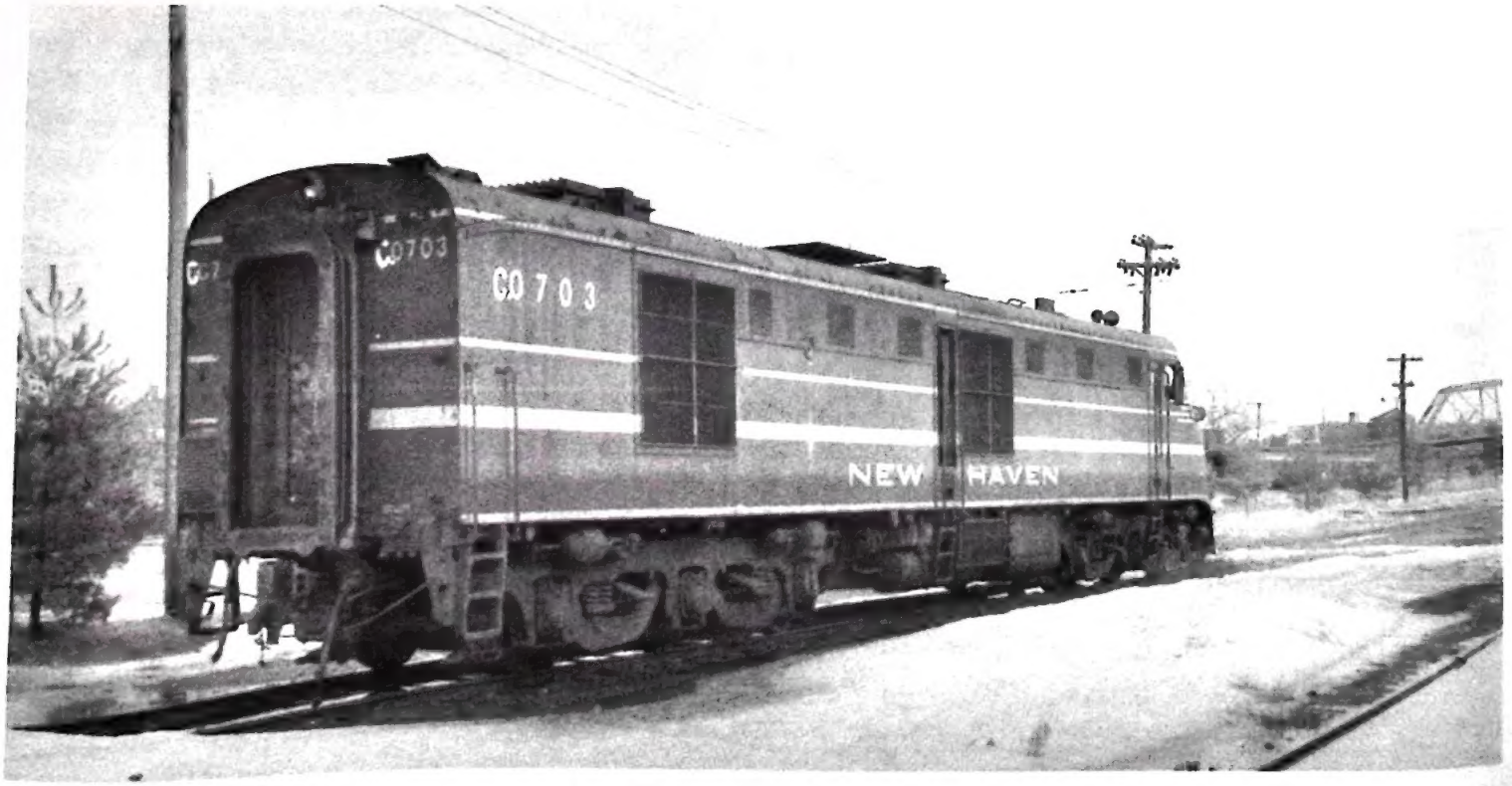
A "one-of-a-kind" paint scheme was applied to unit #0722, painted in a cranberry red color scheme with white stripes. Its name "THE CRANBERRY" was spelled out on side panels and on the nose stripe a circle cranberry logo between New Haven and the road number for use on the passenger train "Cranberry" (Boston to Hyannis). Trucks later received a silver paint and the unit equipped with Hancock air whistles. The unit remained in this color scheme between 1949 and the end of 1953.

Because of the need for three units on the MERCHANTS LIMITED, two DL109s received nose MU connections in 1953, #0725 and 0727 (#0727 had a complete rebuilt nose door in order for crew members to pass between units). The other "one-of-a-kind" paint job was applied to the last DL109 built, #0759, which received the original (white on the bottom panel) McGinnis red-white-black color scheme in 1955. Unit

#0759 went to retirement with this color scheme.

After the delivery of the 1200s-1400s-1600s in 1956, twenty of the DL109 units were condemned, followed by twenty-one more after the delivery of the first thirty EMD FL9s. Commuter service out of Boston and the Old Colony lines kept the remaining nineteen going to 1959. Old Colony service ended on June 30, 1959, which shortly placed the remaining 0700s into retirement. Unit #0716 had been converted in 1957 into a portable third-rail power plant for Boston (renumbered PP716) where it remained until the Penn central era before being scrapped.

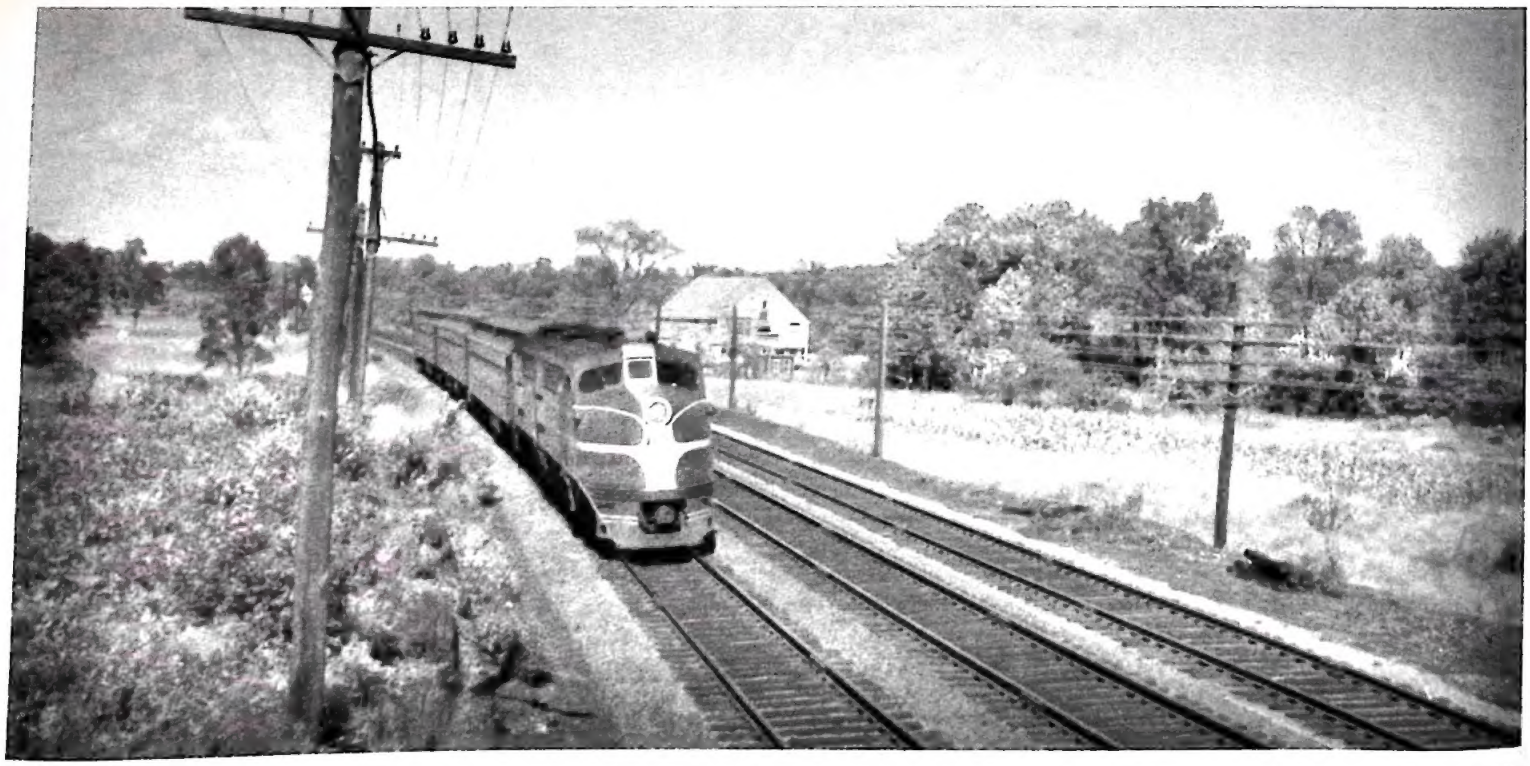
Built by Alco in January 1942, DL109 #0703 was part of the first group of ten, #0700-0709, delivered to the New Haven at the start of World War II. With its improved roof line, #0703 displayed a front and rear view in 1959 when the unit was condemned and ready to be sent to scrap.



With a five car local train, #0703 hustled along the Shore Line enroute to Providence in the early 1950s. Units #0702 and 0703 followed the first two DL109s to the New Haven shortly after the start of World War II, both built in December 1941.

Another member of the first ten, #0705 with a Boston-Providence local, passed the signal bridge along the three track main line near Mansfield, MA. The five car local had the combine at the rear.

Three cars, one baggage and two coaches, was all that was necessary for the mid-afternoon local to Boston. Picking up passengers enroute, the local would arrive at South Station with dependable #0706 providing the motive power for the forty-four mile Providence-Boston run.



DL109 #0707 provided the power for a three car westbound local along a three-track section of the Shore Line near Mansfield, MA. Number 0707 was the first of the 0700s built in April 1942 and placed right on the Shore Line hauling passenger and freight trains.

One day #0707 operated as a single unit and the next day coupled with another DL109 on a Shore Line train. Until the arrival of the Alco PA units in 1947, the DL109s were the first class power for Shore Line trains along with the 1400 series

Working the Needham Branch at West Roxbury, MA in May 1952, #0709 powered a three-car local in the early 1950s. Last of the New Haven's first group of dual-service diesel locomotives, #0709 was built on April 13, 1942, just in time for the war effort. As the last of the first ten DL109s were being delivered, the New Haven pressed the War Production Board for ten more.

DL109 units #0709 and 0700 stopped at Old Saybrook, CT on August 31, 1946. Both units had their "as delivered" carbody panels with windows, but some of the roof louvers had been modified and the roof radiator shutters were in place. Each unit had its original painting arrangement. The engineer looked back along the train for a hand signal from the conductor. (Ed Hermanns)

The War Production Board took control of locomotive production on April 4, 1942. The New Haven requested permission for Alco to build ten more dual service DL109 locomotives for freight and passenger service. With authority, Alco built ten more units starting with #0710 in July 1942. Many years later #0710 headed a Shore Line freight train eastbound towards Boston.

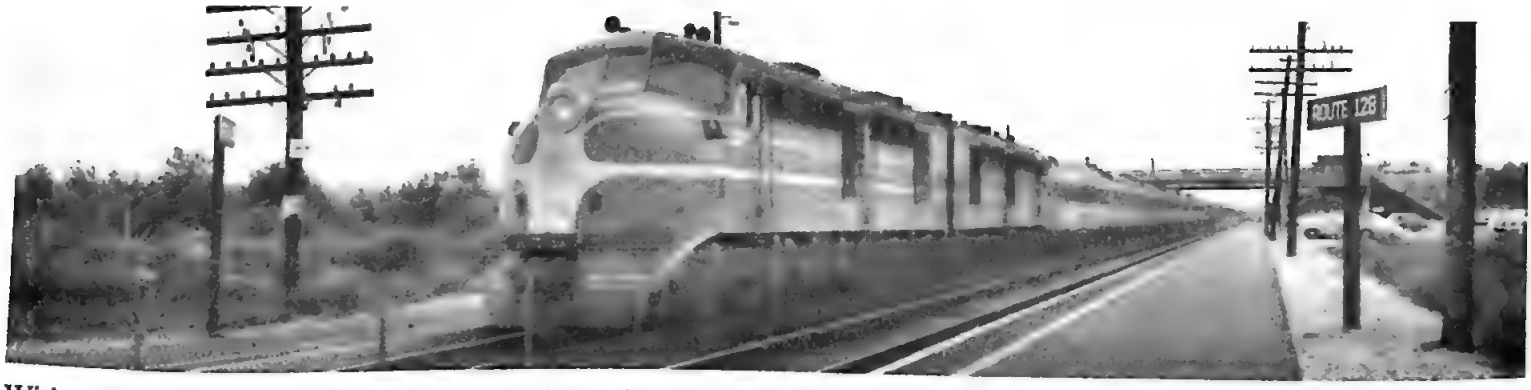
With a two car local, one American Flyer coach and baggage-RPO, DL109 #0711 stopped at Norwood Central on July 26, 1952. Norwood Central was 15 miles from South Station on the line to Blackstone, MA. Railway express trucks were lined up at the station. (Lewis Walter, Bob's Photo collection)

New Haven's #0711 was coupled to a PA unit at Boston in the 1950s. After the delivery of the first ten 0700s, the New Haven immediately ordered ten more, #0710-0719, which were built between July 1942 and January 1943. The War Production Board permitted Alco to build these locomotives as they were dual-service units.

Providing local power, #0714 passed tower SS 178 at Canton Jct., MA in the early 1950s with a two-car train headed for South Station. Most of the 0710-0719 group arrived on the New Haven in the second half of 1942 when both freight and passenger traffic had exploded due to the war, pressing every available diesel unit into service on the New Haven. At the same time, the New Haven purchased 660hp S-1 diesel switchers for the yards using the same 539 diesel engine, but without the turbocharger.

With the dark green scheme with wide stripes, #0714 dashed through Elmwood, CT (south of Hartford) on November 24, 1945, one of the few units repainted in this color scheme during the war years. Number 0714 still had its arrangement of many roof vents in this 1945 scene.

After a snow storm, #0714 stopped at the station at West Roxbury, MA in the early 1950s. The engineer looked back for the hand signal from the conductor before starting his three car train. Living in the house to the right, we could keep tabs on New Haven's DL109 fleet.



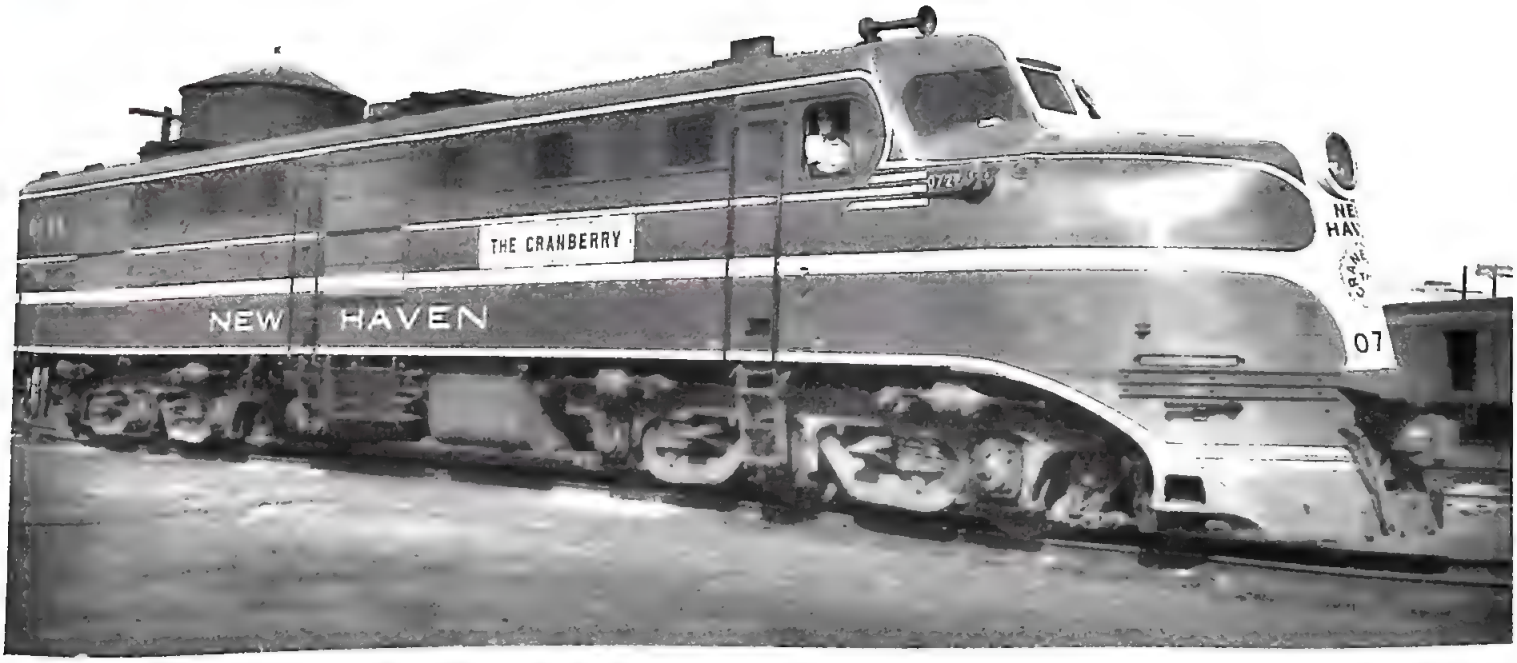
With a Shore Line train, #0716 stopped at the station platform at the Route 128 station on September 22, 1953. This new Route 128 station was 12 miles from South Station on the Shore Line.

Eastbound train #14, THE BOSTONIAN, proceeded through Old Saybrook on August 31, 1946, on its daily trip to South Station. With #0717 in charge, the train had a ten car consist, a baggage car, two CPR coaches, a diner and six NH coaches. At that time, #0717 was only three years old and still in its "as delivered" color scheme. (Ed Hermanns)

With its steam generator working, #0718 idled at Boston in the early 1950s. Before long, #0718 would be coupled to another unit to make a two unit set. With the arrival of the 790 series FM units, the DL109s made an appearance less often on Shore Line trains.

DL109 units #0719 and 0718 moved to their train at New Haven on April 9, 1946. Built by Alco on January 23, 1943, #0719 had the Hunter green with six horizontal pin stripes scheme. Each roof had an assortment of six scoops and vents for the turocharger air intakes and cooling the engine room.

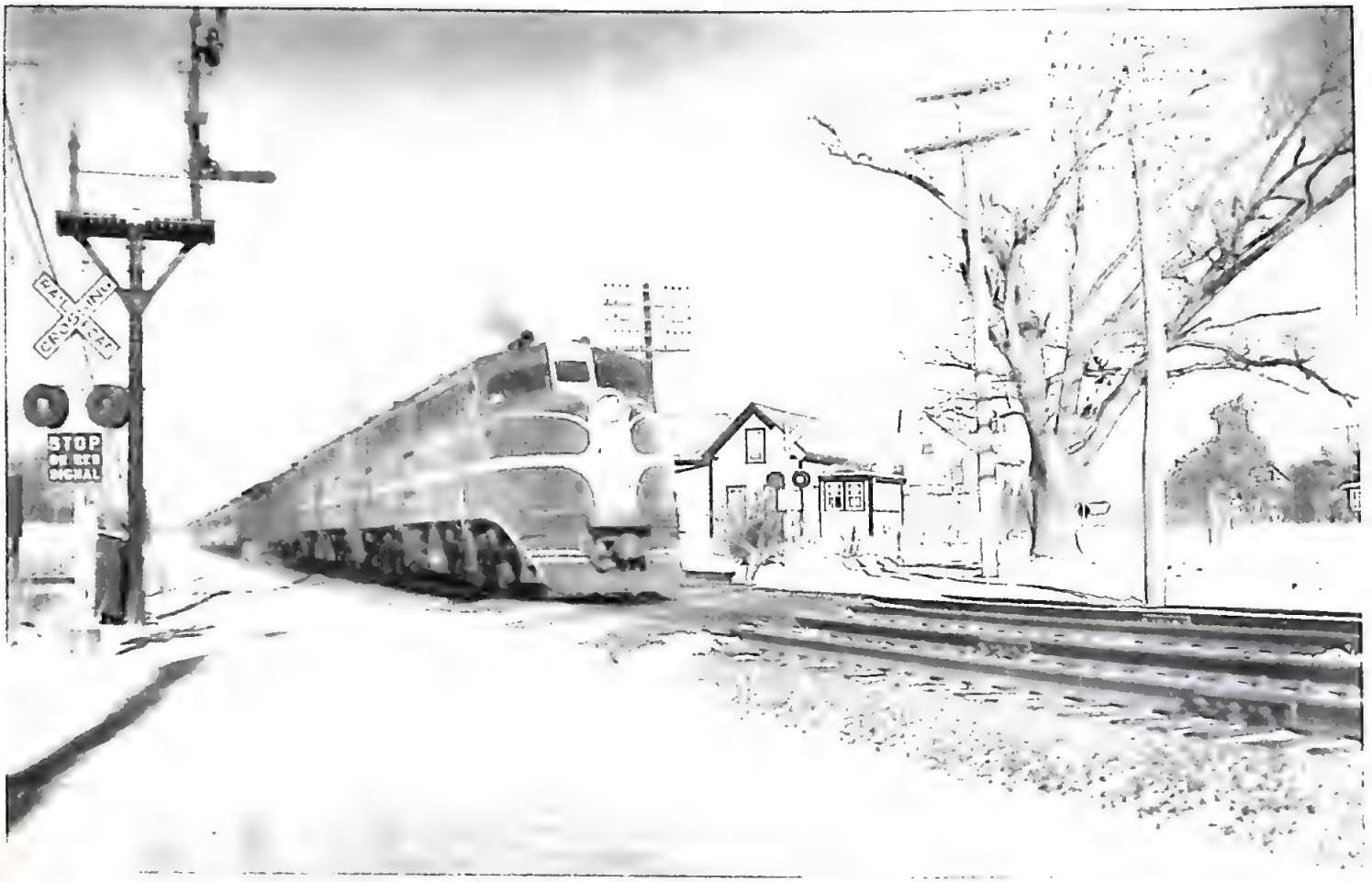
On a passenger extra in the late 1940s, #0720 stopped near the switch frog. New Haven's third group of DL109 passenger/ freight units, #0720-0729, arrived from Alco in the first four months of 1944 at the rate of about two units per month. Green and gold #0720 still had the windows in the upper carbody panels. (P. Bonnet, Bob's Photo collection)



Photographed at New Bedford, MA in 1949, #0722 was photographed dressed in THE CRANBERRY red with white stripes color scheme. Number 0722 carried this color scheme from 1949 to the end of 1953 with silver trucks and Hancock whistles added later.

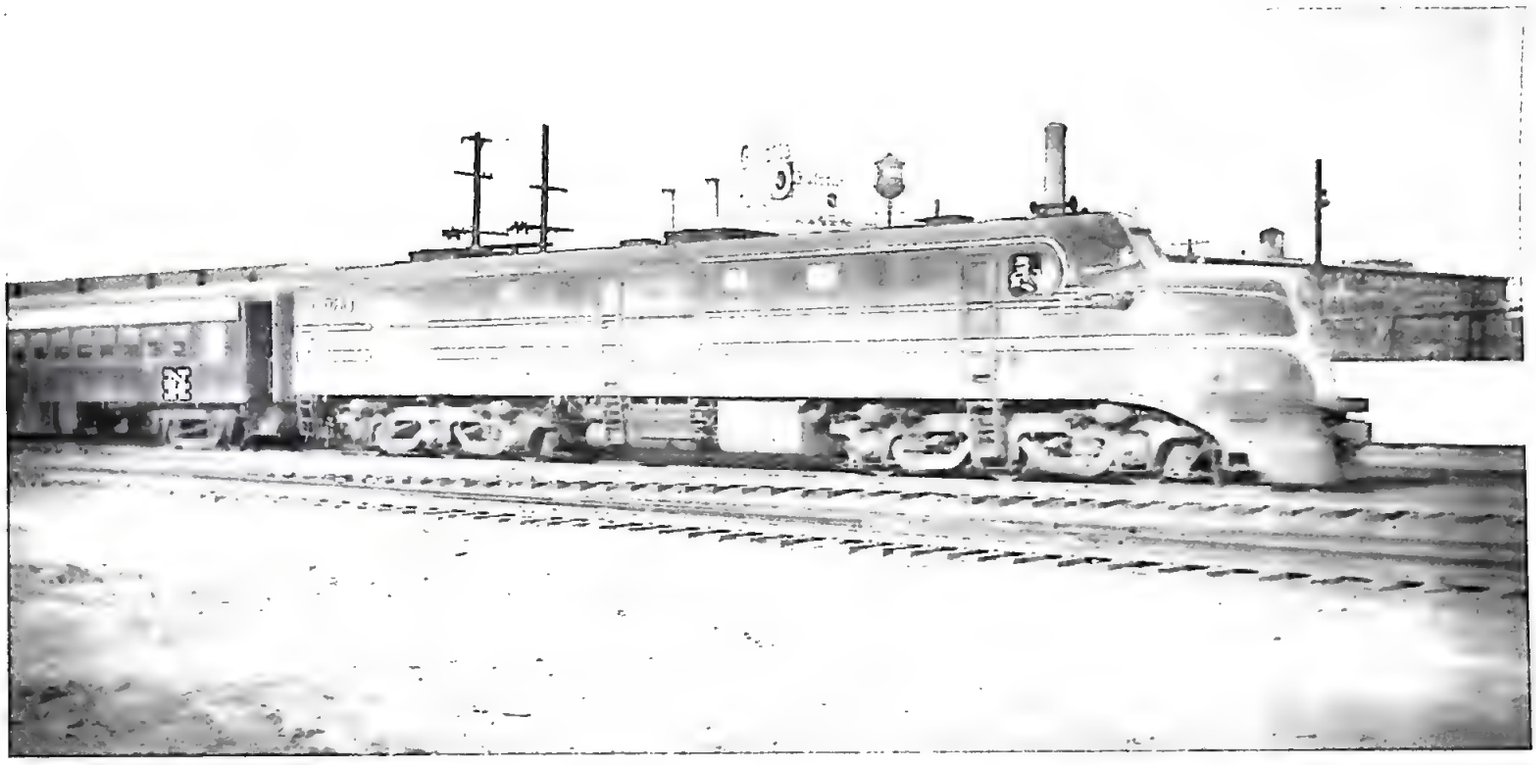
Just clear of the Bridge Street crossing and signal at Willimantic, CT, #0722 and 0721 backed to their train on April 1954. Number 0722's claim to fame as THE CRANBERRY had ended the year before. Alco built this 357,500 pound unit on February 28, 1944.

Soon after being repainted in cranberry red, #0722 departed Buzzards Bay station on August 29, 1949, headed for Boston. At the time, #0722 did not have the Hancock whistles or silver trucks. In the background were the two towers of the Cape Cod Canal railroad bridge.



Along the snow covered right-of-way, #0724 proceeded westbound at Sharon Heights, MA with a Shore Line train in the early 1950s. The semaphore signal indicated clear and the crossing flashers were working as #0724 passed by at track speed.

Two year old #0727 made the turn on the turntable at New Bedford in March 1946 for its return trip to Boston. New Haven's DL109 units had heavy duty friction draft gear and frame improvements on the nose end for freight service. This would have been the "as delivered" color scheme for this group of DL109 units along with the six lower carbody louvers.

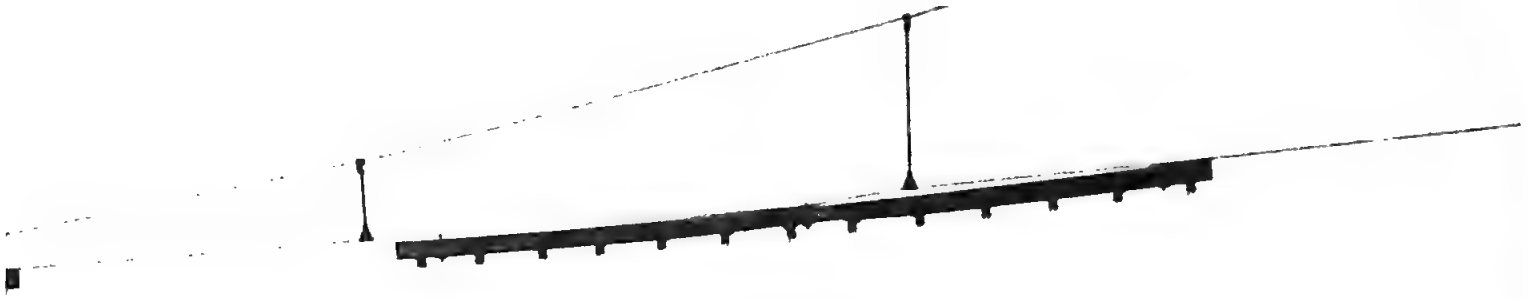


Coupled to its train, #0728 was ready to back into South Station in Boston in the late 1950s. The unit spent its last few years in Old Colony commuter service as FL9s had started to take over the Shore Line assignments.

Hauling tonnage, #0733 plus one other DL109 headed toward Boston in the early 1950s. For the level Shore Line, the A1A trucked DL109s did very well hauling freight between passenger assignments. They were designed with 19:64 gearing for 80 MPH maximum speed with GE 726 traction motors, very suitable for freight service.

In the DL109 era, the change of power took place at New Haven. DL109 #0735 exchanged power with "motor" #0312 at New Haven in the early 1950s. It would take about fifty more years before this change of power scene could be eliminated at New Haven.

New Haven #0736 plus one other DL109 arrived with a passenger train in the early 1950s. During the war years, the New Haven was not the only railroad to receive DL109 units. Gulf, Mobile & Ohio and Southern each received one unit as an add-on to their fleets, but production was restricted by the War Production Board.



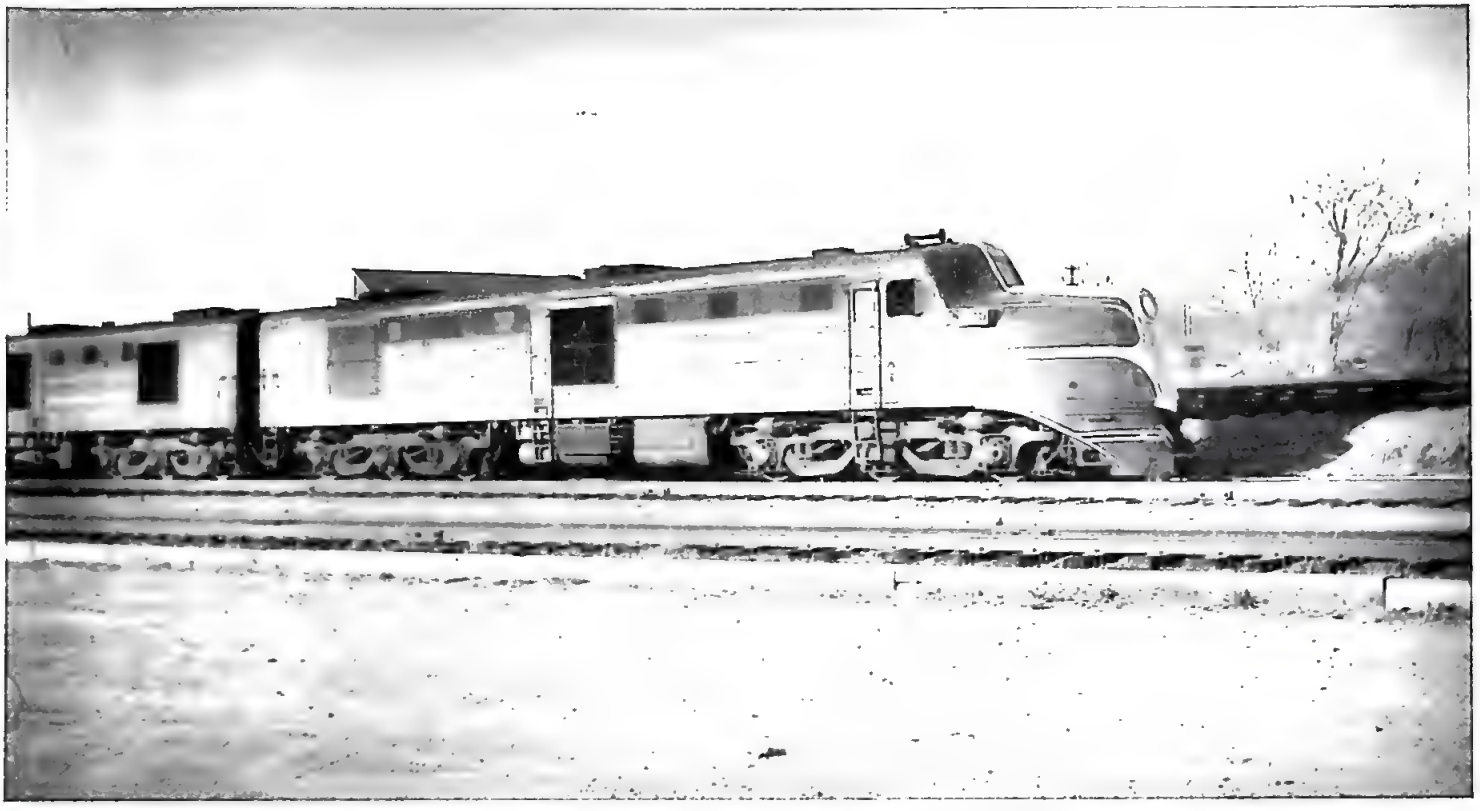
Handling the advertised service on the Shore Line, two DL109s, led by #0735, hauled a string of "American Flyer" coaches. DL109 #0735 had the modified rectangular box shuttles on the roof for radiator cooling with automatic temperature control, but with original carbody panels indicating a late 1940s photograph.

Rounding one of the many curves on the Shore Line, #0737 plus another twin hauled a passenger train. With the success of the first twenty DL109s in dual-service, the WPB allowed Alco to build ten more units for the New Haven starting in October 1944.

DL109s #0738 and 0706 stopped at Old Saybrook on August 31, 1946, with a Shore Line train. In its original color scheme, #0738 had a Pullman green color scheme with Dulux gold striping, while #0706 had been repainted in the Hunter green with gold stripes color scheme. (Ed Hermanns)

New Haven's cab unit #0738 arrived at New Bedford in 1949 in passenger service. Its new paint scheme applied about two year earlier included a warm orange carbody with six silver gray pin stripes. The roof, cab window area and upper side panels had a Hunter green paint matching the first group of PAs. For the sides, the windows had been replaced with a grill and air intakes. (P. Bonnet, Bob's Photo collection)

With new rectangular box shutters for the roof and upper grill side panels, #0739 was at Boston in the early 1950s. Painting was the final green and gold stripes scheme for this January 1945 built unit. New Haven's DL109 units were about the heaviest A1A-A1A trucked cab units built in the U.S., 357,500 pounds.



New Haven #0742 and 0705 were MUed together for a train in the late 1950s. DL109 #0742 had had all of its side panels renewed and the windows replaced with upper grill screening. Units #0740-0744 were built as a group in January and February 1945, builder numbers 72925-72929.

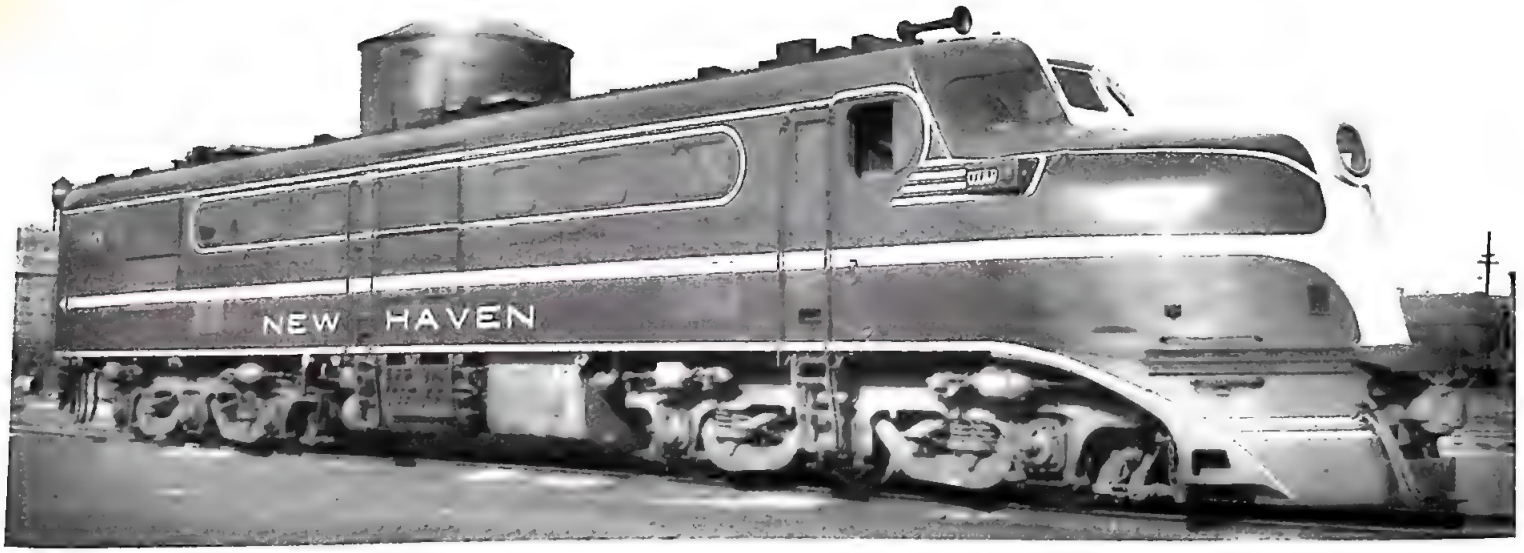
Units #0742 and 0740 hauled the eleven car Train #20, THE PURITAN, from New Haven on its New York City to Boston route on June 22, 1957, stopping at Old Saybrook. Its eleven car consist included an express car, three baggage cars, a parlor car, a diner and five coaches. With the arrival of FL9 units later that summer, these DL109 units would be bumped to commuter service or retirement. (Ed Hermanns)

At Kingston, RI station, #0743 and 0755 were in charge of a Penn Station train. Both units were in the Hunter green color scheme with silver gray stripes, "as delivered" colors for the 1945 built DL109 units. These units were delivered with the box roof top shutters and extra six side panel louvers versus four for the earlier DL109s.

Along the Shore Line, #0744 powered a late afternoon local westbound to Providence. Built in February 1945, it was one of the last twenty DL109s delivered that year to the New Haven. Alco would have built more DL109 units, but they were limited by the War Production Board.

Sometimes when the Shore Line trains were light, only one DL109 would be assigned as the motive power. On August 8, 1948, #0744 handled a seven car train just as more motive power in the form of PAs was being delivered. Number 0744 had its "as delivered" Hunter green with gold pin stripes color scheme.

Unit #0747 plus another DL109 hustled freight along the Shore Line in the late 1940s. Both units had the Hunter green with gold pin stripes scheme and their original carbody panels.



In its green with gold stripes color scheme, #0749 paid a visit to New Bedford in 1949. Built by Alco in February 1945, #0749 came delivered with the six louvers per side and box radiator shutters on the roof. Readville Shops had repainted the units, but not replaced the side window panels. (P. Bonnet, Bob's Photo collection)

After its overhaul at Readville shops, #0750 stopped at New Bedford in 1949. The unit had new carbody panels and upper grill screening. This carbody style and paint scheme would become standard for the early 1950s for New Haven's DL109 units. (P. Bonnet, Bob's Photo collection)

Under the tell-tales for the approaching bridge, #0751 moved eastbound with a short four car train in the early 1950s. As material became available, Alco produced the last fifteen DL109s, #0745-0759, in just three months, February-April 1945. The New Haven's 60 units kept the railroad moving during the war years.

With a PA unit, #0752 stopped at Old Saybrook on May 28, 1949. By this date, Readville Shops was overhauling the DL109 units, replacing the carbody side panels and making roof modifications. During the War Years, the 0700s did an excellent job hauling freight or passenger trains, the largest fleet of dual-service diesel cab units in the United States. (Ed Hermanns)

With a coat of Hunter green paint with gold pin stripes, #0752 posed for a picture at the Alco plant, one of the fifteen units delivered to the New Haven in February-April 1945.

On November 16, 1947, #0753 stopped at Meriden, CT station with a Springfield line passenger train. This DL109 unit was in its "as delivered" Hunter green with gold pin stripes color scheme. Two blasts on the signal and #0753 would be off with its train for New Haven.

In Old Colony commuter service, #0753 was at Greenbush, MA on a Sunday in August 1958. These units would layover for the weekend and return to service on Monday morning. On June 30, 1959, all Old Colony service ended, sending #0753 into the retirement line at Boston.

Rolling tonnage toward Providence, #0757 passed through the Kingston, RI station in the late 1940s. Built on April 18, 1945, #0757 now was painted in a warm orange color scheme with silver gray pin stripes and a Hunter green roof and upper panels. The unit had been repainted without the change in upper (window) carbody panels.

CLASS DER-2

CLASS	ROAD NO.	BUILDER	MODEL	DATE BUILT
DER-2A	0400-0429	ALCO	FA-1	5-10/47
DER-2B	0450-0454	ALCO	FB-1	5-10/47
DER-2C	465-469	ALCO	FB-2	11/51

In 1944, Alco began a big push to develop the model 244 diesel engine for road freight locomotives. With supercharging, the 12-cylinder 244 could be boosted from 1000hp to 1500hp for traction. On August 1, 1945, the drawings were ready for the production of the first 12-cylinder 244 diesel engines at the Auburn, NY plant of Alco. With the first two engine blocks completed in October 1945, they were placed in Alco cab units #1500 and 1502 for road testing in December on the Lehigh Valley. They were joined by a B-unit #1501 also equipped with a V-12 244 diesel engine rated at 1500hp. The A-units measured 51-feet 6-inches between coupler pulling faces and the B-unit 50-feet 6-inches long. Standard drop side equalizer trucks with 40-inch wheels and a 9-foot 4-inch wheel base were used. General Electric furnished the GT 564B main generator and four GE 726 traction motors. With the standard 74:18 gear ratio, the maximum speed was 65 MPH and maximum continuous tractive effort, 34,000 pounds at 13.5 MPH.

In February 1947, the specification was changed to DL208A for the 1500hp A-unit and DL209A for the B-unit. All the belt driven auxiliaries were changed to mechanical drives such as the auxiliary generator and a second auxiliary generator now used to power the motor driven traction motor blowers. Also, GE 752 traction motors were now used to improve the continuous tractive effort to 42,500 pounds at 11 MPH. New York Central #1000-2300-1001 was the first A-B-A set built under the new specification.

After testing the A-B-A set of Alco's "Black Maria" demonstrators in 1946 on the Maybrook line, the New Haven placed an order for fifteen A-B-A sets of Alco's new road freight diesels, later called the FA-1 for A-units and FB-1 for B-units. Like the NYC, they were to be built under DL208A&B with GE 752 traction motors.

First delivered in May 1947, the A-B-A sets were built over the next five months. Each unit wore the warm orange color scheme with silver gray pin stripes and black lettering. The roof and upper side panels and around the cab window were Hunter green and the trucks and fuel tank black. None of the A-units had MU connections on the nose end. As heavier trains were needed on the Maybrook line, five more B-units were ordered to make five A-B-B-A sets of road power. Delivered in November 1951, the B-unit model had changed to the 1600hp FB-2, a longer (52-feet 8-inches long) unit that allowed space for a 4,500 gallon per hour steam generator and a larger water storage tank for this steam generator. New Haven didn't need the steam generator option, but needed them for freight service only. New Haven had dropped the "0" in front of the road number by 1950, so the B-units were numbered #465-469. The paint scheme had changed to Pullman green with Dulux gold stripes at the time of delivery for those B-units. In the early 1950s, Readville shop repainted the other 45 FA and FB units to have matching sets of green units.

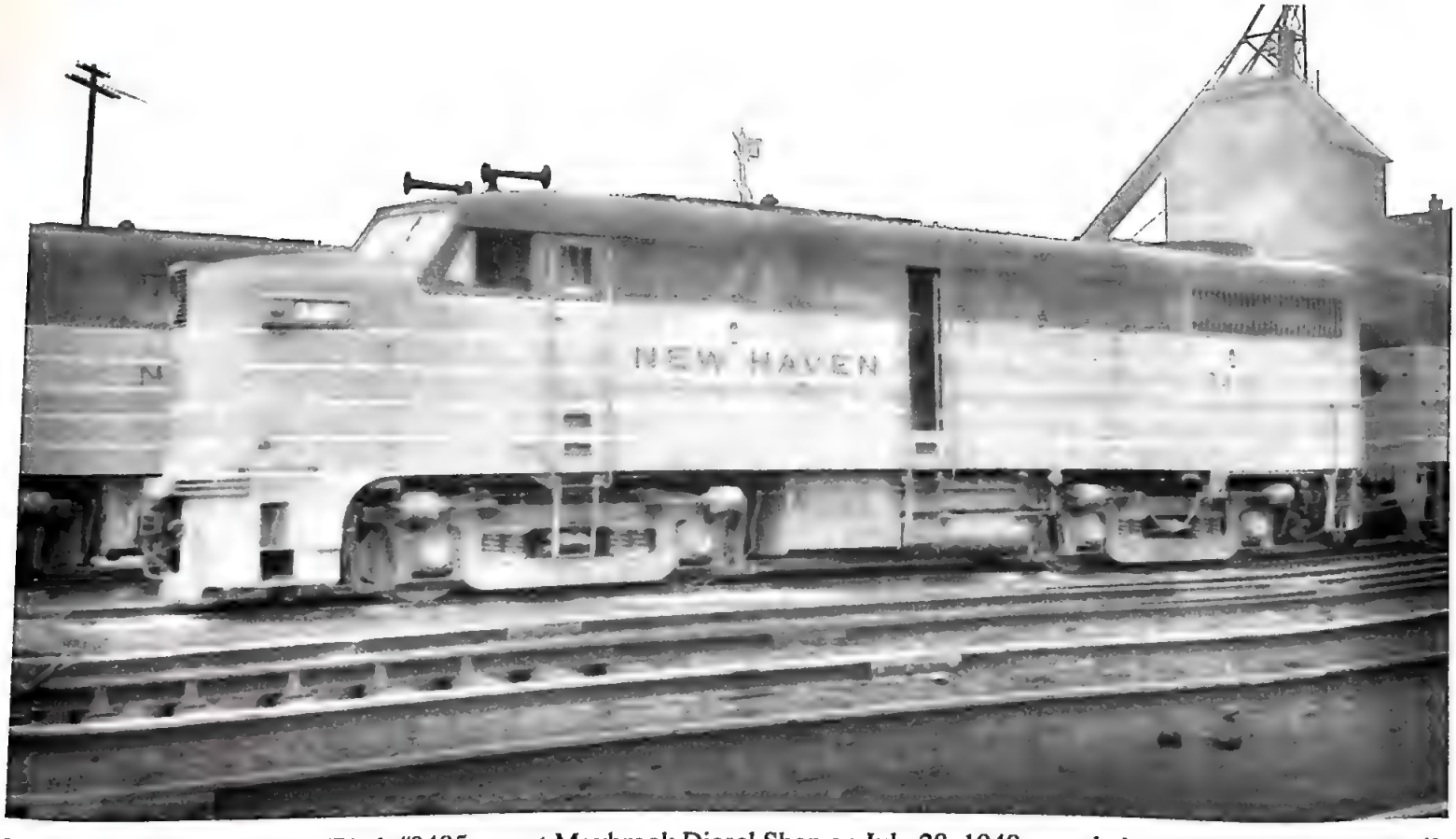
Starting in January 1956, FAs were repainted into the McGinnis color scheme with #0407 being the first of the class repainted. On the side, the white was on the upper carbody panels, black in the center and Socony red on the bottom with red on the nose. During the 1957-1958 period, five A-units, #0401, 0405, 0417, 0419 and 0428 had nose MU connections applied by the New Haven in order to make more four unit road sets.

After the closing of Readville Shops, the New Haven sent eight FAs to Alco for rebuild in 1959, FA-1s #0401, 0418, 0426 & 0428, FB-1s #0456, 0458, 0462 and FB-2 #467, all returned rated at 1600hp. The rebuilds also included a change in air brake equipment so they could operate with the 24RL equipped 1200s, 1400s and 1600s. At the same time, the NH at its New Haven Shop upgraded nine FAs with rebuilt 1600hp diesel engines, #0407, 0414, 0419, 0420, 0422, 0423, 0455 and 0464. All 50 FA/FBs were still on the roster in 1960, but that would soon change. FA-1 #0427 was the first to be retired in 1962. By the Penn Central merger only four cab units and eight B-units remained active, many traded to Alco and GE on new units. Two of the units traded to GE went to their North Bergen, NJ service shop to be converted to Long Island RR power cars #617 (ex 0428) and #618 (ex 0401) in 1973-74. Now owned by the Connecticut Valley RR Museum, #0401 has been preserved and former #0428 (ex LIRR) is at the Danbury, CT Railway Museum.

Class unit #0400 posed with B unit #0457 shortly after delivery in 1947 in its warm orange with silver gray pin stripes livery.

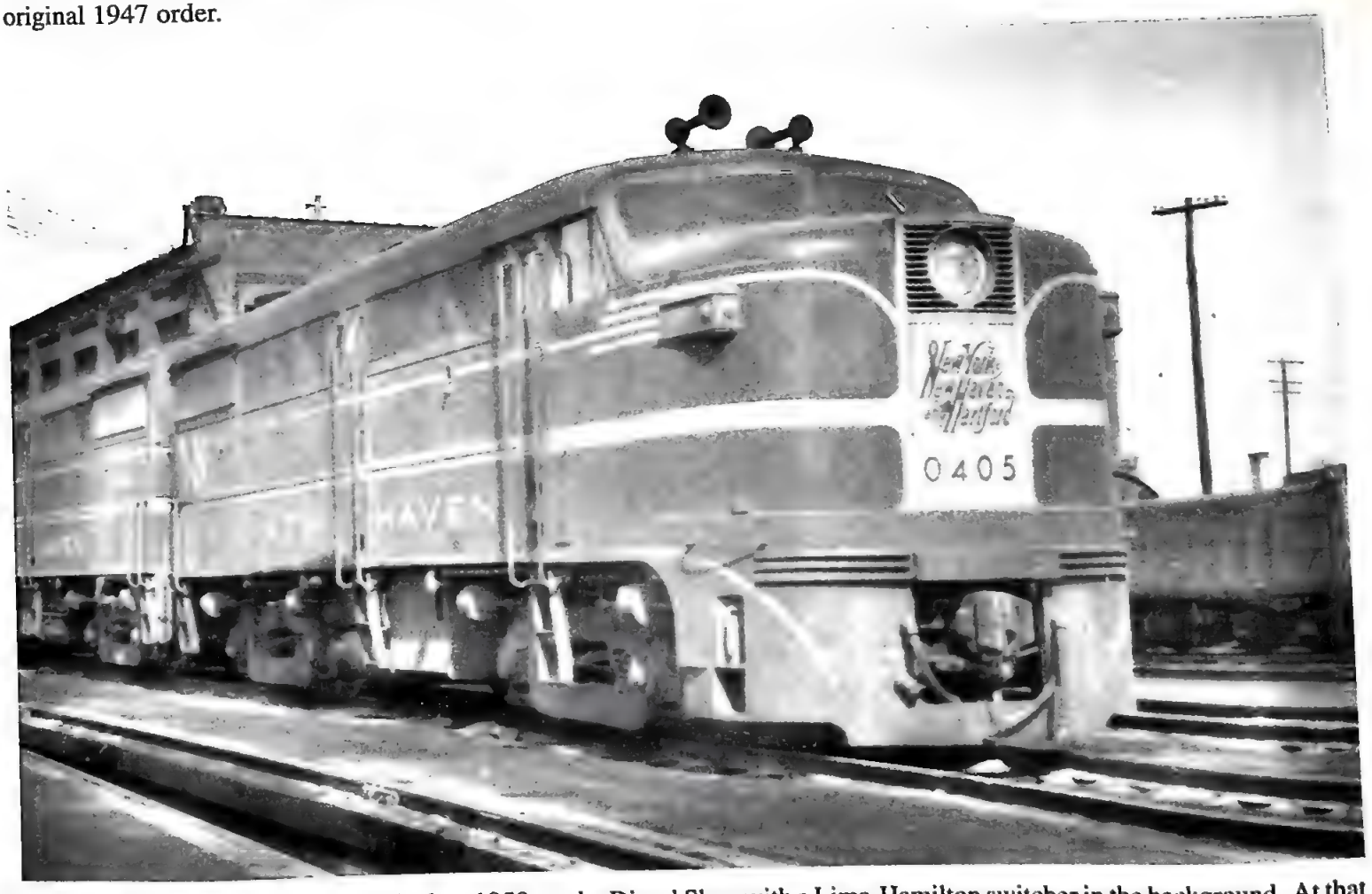
Having just received the signal, the engineer in #0401 at Readville, MA started to accelerate his train in 1947.

Number 0403 led a consist at South Braintree, MA on April 3, 1963. In 1957 and 1958, five FA A-units were given nose MU connections to make a consist like this possible. Unit #0403 was not one of the FA-1s upgraded to 1600hp by the New Haven in the late 1950s. (Ed Hermanns)



Leading an A-B-A consist, FA-1 #0405 was at Maybrook Diesel Shop on July 28, 1949, coupled to FB-1 #0458. Alco built #0405 on June 17, 1947, assigned a New Haven class of DER-2a. For the New Haven, Alco built fifteen A-B-A sets of FA freight cab units in 1947. (Ed Hermanns)

New Haven's FA-1 arrived at Maybrook on October 14, 1956, with FA-1 #0405 in the lead. With the arrival of five more B-units in 1951, more A-B-B-A sets were on the line as tonnage increased. In this case, both B-units (FB-1s) were part of the original 1947 order.



FA-1 #0405 was at Maybrook in the late 1950s at the Diesel Shop with a Lima-Hamilton switcher in the background. At that time, the FA units stayed together as they could not MU air brake wise with the newer 1200-1400-1600 series road switchers.

In the late 1940s, #0405 plus one other FA-1 hauled tonnage on the Shore Line near the East Haven tunnels, both still painted in the warm orange with silver gray pin stripes. By the 1950s, very few trains would be hauled by just two FA units, as three and four unit sets became the norm in 1951.

FA-1 #0406 idled with #0452 at Maybrook now repainted in the Pullman green color scheme with Dulux gold stripes. Trucks and fuel tank were painted black, New Haven's second color scheme applied to these units.

A matched A-B-A set of FA units, #0409-0456-0418, stopped at Boston in about 1950-1951. Leading FA-1 #0409 was parked along side DL109 #0733, the DL109 painted in green and the A-B-A set in warm orange.

An A-B-B-A consist idled at Maybrook on October 14, 1956, with #0409 on the point. In this case, both B-units were FB-1 units making a 3000hp road set for the New Haven-Maybrook road haul. Starting in 1951, most FA sets for Maybrook freights were A-B-B-A consists.

On a single track line, #0410 and a FB-1 and a FA-1 rolled tonnage in about 1948. The matched set were in their "as delivered" warm orange color scheme when the New Haven had things in order for its freight diesel fleet.

A fireman's side view of #0413 was photographed at Maybrook on May 20, 1956. This was the second painting arrangement for the FA units, Pullman green with Dulux gold stripes. (Ed Hermann)

With gons on the head end, three FA/FBs hauled BO-3 from Boston to New Haven in the mid-1950s hauling up the grade near Sharon, MA. The A-B-A consist with #0414 had been repainted at Readville Shops in green for continued service on the New Haven.

FA-1 #0415 stopped at Maybrook on May 20, 1956, in a road consist. As indicated by the chain on the #2 truck, #0415 was idling with its hand brake set to prevent a "roll away".

Shortly after delivery, #0418 was photographed at New Bedford with its "as delivered" warm orange color scheme with silver gray pin stripes. All 45 FA and FB units were delivered in 1947 in this color scheme but not the five FB-2 units delivered in 1951. Hunter green was provided along the top panel and around the cab. (P. Bonnet, Bob's Photo collection)

Being the lead unit in the consist, #0418 idled on the pit at Maybrook on May 20, 1956. Coupled to FB-1 #0451, the units were in their second color scheme, green with gold stripes. In 1959, #0418 would be one of four FA-1s to return to Alco for rebuilding. (Ed Hermanns)

FA-1 #0418 plus FB-2 #469 plus FA-1 #0428 stopped at Charles Street in Providence on October 8, 1967. The two FA-1s, #0418 and 0428, had been rebuilt by Alco in 1959, returned rated at 1600hp, having scotchlite lettering and Socony red headlight casing in the Alpert paint scheme. Still painted in green, FB-2 #469 had its air brake equipment modified to run with the rebuilt units.

FA-1 #0418 and FB-1 #0456 were part of a group of four A-units and four B-units rebuilt by Alco in 1959. With sign, #0418 and 0456 returned to the New Haven from Schenectady now rated at 1600hp.

An A-B-A set of FAs (#0418-0456-0409) idled at Boston between runs, all painted in the warm orange color scheme. Leading FA-1 #0418 had been assembled at the Alco plant about three years earlier with a 1500hp 12-cylinder model 244 diesel engine. About nine years later, #0418 would be rebuilt to 1600hp.

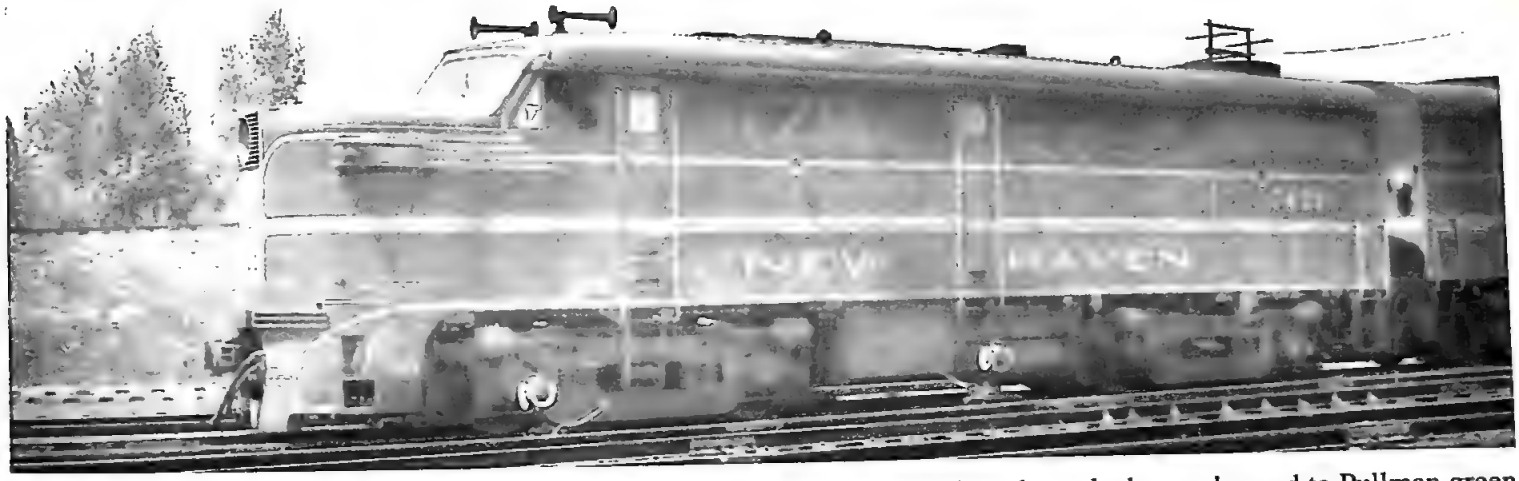
Under the wire at New Haven, #0419 led an A-B-A consist to Maybrook in the late 1940s. These 45 units dieselized the Maybrook line freight trains and killed most of New Haven's 2-10-2s.

NH #0419 was at New Haven on May 17, 1959, painted in the McGinnis color scheme, red on the bottom panels, black in center panels and white along the top grillwork. That year the New Haven upgraded #0419 to 1600hp and had MU connections (air and electrical) installed on the nose and pilot.

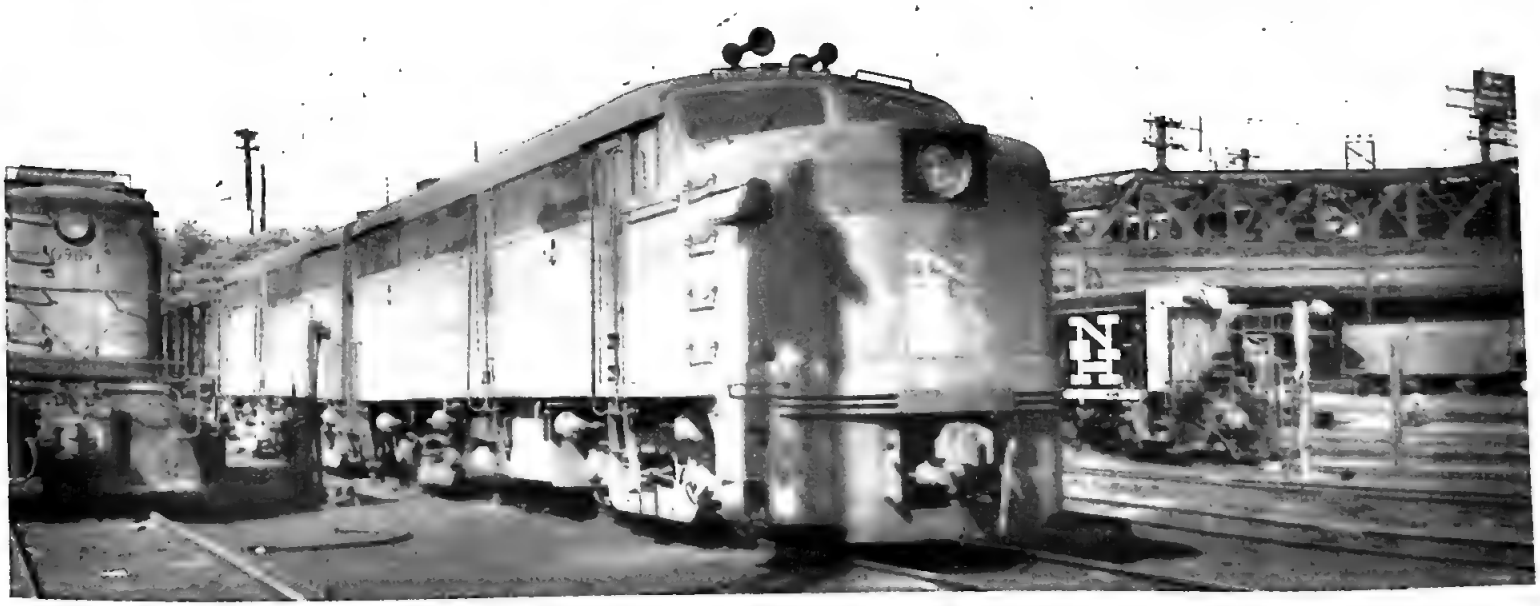
FA-1 #0420 looked very shabby in this late 1950s photograph taken at Brockton, MA; however, #0420 would be one of eight FA-1s rebuilt by the NH at its New Haven Shop and upgraded to 1600hp. The upgrade extended the life these cab units into the mid-1960s.

New Haven FA-1 #0422 was coupled to FB-2 #468 at Maybrook in the mid-1950s. The speed indicator cable went from the R1 journal through the cab floor to the engineer's control stand and the cooling coils at the rear of #468 were for the air

Operating as a single unit, #0422 crossed the two track bridge 17.07 located between Stonington and Westerly in its first year of the FAs operation. FAs were not very often used as single units on road freight trains.



Many years later, #0422 idled at Maybrook in a several unit consist. Its paint scheme had now changed to Pullman green with Dulux gold stripes.



Idling on the pit at Oak Point, NY, #0423 was ready for the return trip to New Haven in August 1969. The unit had been repainted in Alpert color scheme of Socony red and black after being upgraded to 1600hp by the New Haven, but without nose MU.

Changing directions at South Station, FA-1 #0425 led an A-B-B-A set of 0400s in the 1950s. Four-unit sets of FA units were common on the Maybrook Line, but not at Boston at that time. Six thousand was more than enough horsepower for level Shore Line freights. Number 0425's almost-all-green nose is a patchwork paint scheme.

Rounding the curve under the wire between Devon Jct. and New Haven, FA-1 #0426 led an A-B-A set hauling freight to Cedar Hill yard from Maybrook. All units were in green, but the paint was stating to fade on #0426. Unit #0426 was one

One of the four B-units rebuilt by Alco in 1959 was FB-1 #0458, photographed in consist on October 9, 1966, coupled behind #0428 (another one of the Alco rebuilds). The four B-units rebuilt were FB-1s #0456, 0458 and 0462 plus FB-2 #467.

FB-1 #0461 was on the pit at Maybrook on May 20, 1956, one of fifteen FB-1 units on the New Haven, but was not one of the B-units later upgraded to 1600hp.

Built in 1947, FB-1 #0462 was rebuilt by Alco in 1959 and the diesel engine up-graded to 1600hp. On July 13, 1968, #0462 idled at New Haven in a cab unit consist. (Fred Kern)

Number 465 was one of five FB-2 units built by Alco for the New Haven in November 1951. By that date, the NH had

In 1959, the New Haven sent four FA-1s, three FB-1s and one FB-2, #467, back to Alco for rebuilding. The rebuilding also included upgrading the air brake equipment so these units could MU with 1200s-1400s-1600s. Proving the point, #467 was MUed between a 1400 and #1603 at Dover Street in Boston in the early 1960s.

Painted in the McGinnis color scheme, FB-2 #468 stopped at New Haven on July 13, 1968. New Haven received its five FB-2 units, #465-469, in November 1951. Becoming PC #3396, this B-unit remained in service for about one more year, retired September 10, 1969. (Fred Kern)

New Haven FB-2 #469 was not one of the units rebuilt in 1959 by Alco, but it did stay on the property until the PC era. In its original paint scheme, #469 was in the dead line at New Haven in July 1968. Assigned PC number 3397, #469

DIESEL ROAD DEMONSTRATORS ON THE NEW HAVEN 1945-1953

ROAD NUMBER	MODEL	BUILDER	DATE BUILT
2000-2001	0-6-6-0 1000/2 DE	BALDWIN	1945
1500	DRS-6-5-1500	BALDWIN	1946
1500A, B, C	DL203-1 AND DL203-2	ALCO	1946
985-984a	ERIE-built	FM	1947
4801-4802	CPA24-5	FM	1950
TM-1 & TM-2	H24-66	FM	1953

In 1945, Baldwin built a pair of 80-foot long carbody units riding on General Steel Casting A1A trucks. Inside, the units had two 8-cylinder VO diesel engines driving Westinghouse 480 main generators. The Vapor steam generator required a 1200-gallon water tank, and the second 1200-gallon tank was for diesel fuel. Completed in January 1945, the first unit, #2000, painted red cream and blue, was joined in March by the second unit, #2001. Starting in June, the pair tested on the New Haven including freight runs between Maybrook and Cedar Hill yard and Shore Line trains to Boston. By mid June, they moved on to the B&M. On the New Haven they did not do as well as the DL-109s and had several mechanical problems.

Next to arrive were Alco's "Black Maria" 1500hp demonstrators 1500A, B, C, an A-B-A set. To test its new 12-cylinder model 241 diesel engine, Alco built an A-B-A set of black painted carbody units with noses looking like a DL109 in September 1945. The A-units were 51-feet 6-inches long housing the 12-cylinder 241 diesel engine, a GT564 main generator and air compressor. The first 12-cylinder 241 engine had been completed at Auburn in March 1944. At first the units tested on the Delaware & Hudson and Erie before returning to Schenectady for teardown inspection. Starting in January 1946, the A-B-A set tested between New Haven and Maybrook. Freight tests on the Maybrook line ended on June 12, 1946, when 1500c was returned to Schenectady to have 80MPH gearing installed to match New Haven's DL109 units for passenger service testing. Number 1500C ran in local service as a single unit and with DL109s on the Shore Line.

To showcase its new road switcher, Baldwin produced a DRS-6-4-1500 (six-axle, four-motor, 1500hp) demonstrator in November 1946. The unit rode on General Steel Casting's A1A trucks with a Vapor 1600 pounds per hour steam generator. Painted red with silver stripes, the unit demonstrated on the Central Railroad of New Jersey and New Haven in both passenger and freight service. Neither railroad placed an order and the unit returned to Eddystone Plant for a later sale to the Union Pacific.

Two Erie-built cab units built for the Union Pacific in June 1947 were diverted to the Atlantic City Railway Manufacturers Association trade show in July. The units also tested and demonstrated on the New Haven and Baltimore & Ohio, but neither road ordered Erie-built units. These units were retained by Fairbanks-Morse from June to November 1947.

FM's first two C-Liners (CPA24-5 #4801 and 4802) began testing on the Milwaukee in late December 1949 painted a dark green. After the initial tests, both units returned to FM for adjustments and repainting into a two-tone green scheme. After the Milwaukee, the units moved to passenger service on the PRR operating between Chicago and Harrisburg, then moved on to the Long Island RR before the New Haven. In July, they tested on the Shore Line as single units or together on longer trains. It would be less than a year later when #4801 and 4802 returned to the New Haven as #790 and 791 in April 1951.

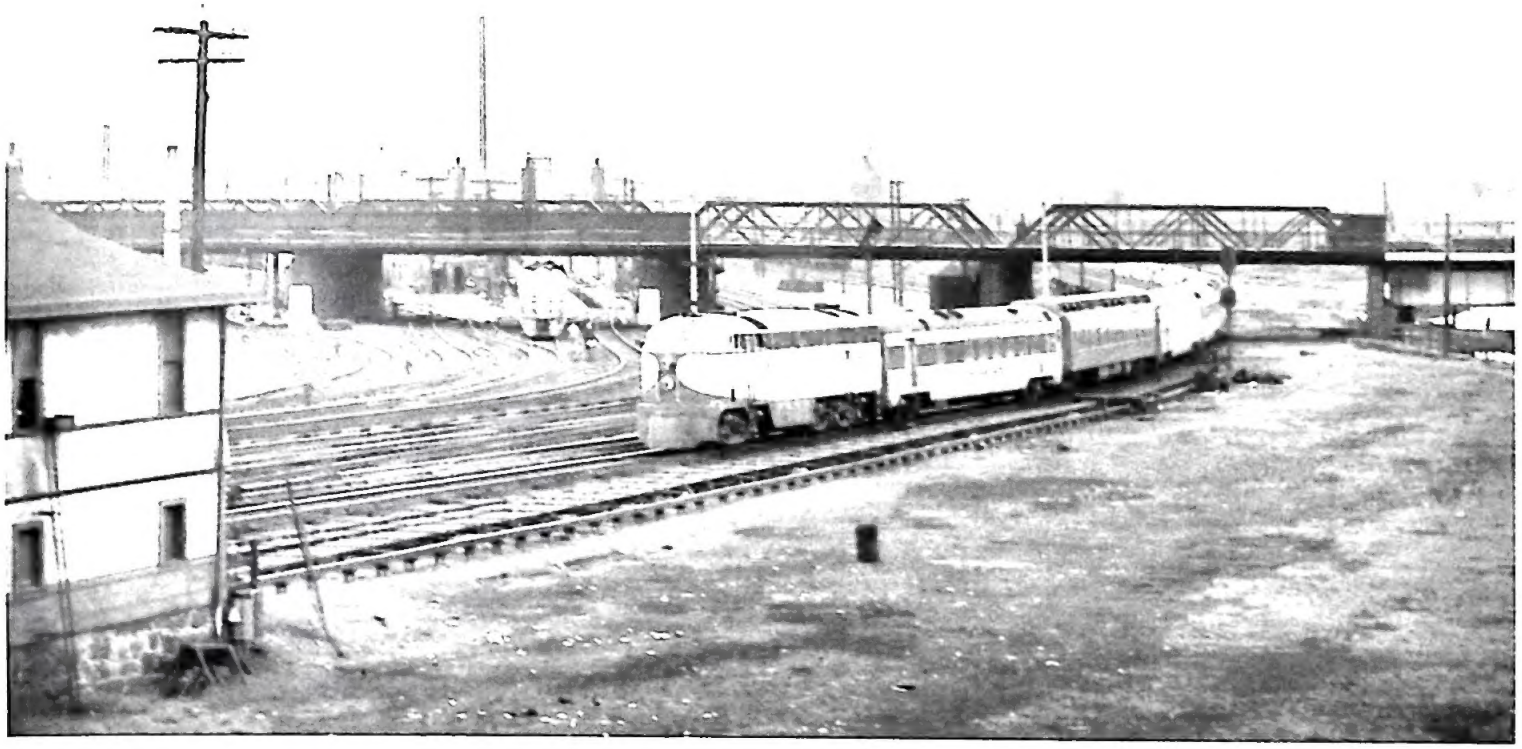
Using the same 12-cylinder opposed piston diesel engine as in the CPA24-5 cab units, FM designed and built four 2400hp large road switchers in 1953 mounted on C-C trucks. At Beloit, FM assembled two of these units, FM #TM-1 and TM-2, in April 1953 for demonstration on eastern railroads and two in May 1953, FM #TM-3 and TM-4, for demonstration on the west coast. During their tour on the New Haven in July 1953, the units were tried in both freight and passenger service. The New Haven was impressed with their performance, but had already dieselized and placed no orders.

A front view of DL203-1 #1500c taken at New Bedford on March 4, 1946, shows the nose of this 1500hp unit which looked very similar to New Haven's DL109 units.

At New Bedford, A-unit #1500C and B-unit #1500B were on the service track on March 4, 1946. Built in September 1945, these

FM CPA24-5 demonstrators 4802-4801 were testing on the Milwaukee Road at Milwaukee, WI on April 22, 1950, painted a two-tone green. In April 1951, both units became New Haven #791 and 790 for New Haven Shore Line passenger service. An FM field service engineer checks out both units as they wait at the Milwaukee station. (FM photo, Bob's Photo collection)

FM demonstrator #4801 filled in for a delayed Long Island CPA-20-5 order from Fairbanks-Morse on June 26, 1950. Long Island's new C-Liners would be delivered later that month and #4801 would move on to its demonstration on the New



While turning a Shore Line train at Boston, FM C-Liner #4801 passed Broadway Tower on July 17, 1950. In April 1951, #4801, a CPA24-5, would become New Haven #790 for Shore Line service. (FM photo, Bob's Photo collection)

Working a Boston commuter train, TM-2 rolled into Braintree, MA on July 6, 1953. The New Haven was impressed with the big 2400hp road switcher, but didn't place an order. (FM photo, Bob's Photo collection)

Powering a Maybrook freight train, FM Train Masters TM-2 and TM-1 operated at Cedar Hill in July 1953. (FM photo, Bob's photo collection)

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